



Is Now Part of Keysight

2026 Spirent Federal PNT Simulation Training Seminars

Los Angeles | Huntsville | Colorado Springs

Planned Agenda (Subject to Change)

High-Density NAVWAR: Modeling the Modern Battlespace

Day 1

7:30	Registration Begins with Light Breakfast Served	
8:30	Welcome and Orientation	
Scenario Generation Sessions		
	Beginner User Track	Experienced User Track
9:00	NAVWAR Fundamentals: Session 1b Building the Foundation Objective: Working step-by-step alongside a PNT test expert, you will build a complete test scenario of a mounted ground vehicle in a real-world NAVWAR environment. You will run the scenario live on a receiver as a class and successfully jam and spoof the receiver. Learn: Basics of simulation, trajectory generation, antenna configuration, and constellation setup	Advanced NAVWAR: Session 1e Jam then Spoof Takeover Objective: Working step-by-step alongside a PNT test expert, you will build a test scenario of a loitering UAS encountering multiple high-power jammers and a spoofer. You will execute the test live on a receiver as a class and successfully jam and spoof the receiver. Learn: How to execute a spoofer takeover with a knock-out jammer
11:30	Lunch	
12:30	Session 2	
	Testing CRPA (Anti-jam Antenna) Systems	
1:00	Fundamentals Continued: Session 3b Adding Jammers and Spoofers Learn: Adding static jammer and spoofer transmitters, how to change from FRPA to CRPA in the scenario	Advanced Continued: Session 3e Power-Matched Spoofing Learn: Use advanced spoofing techniques by constructing spoofers focused on GPS time manipulation and message modifications.
4:00	Session 4	
	Developing and Executing GNSS Test Scenarios with PNT Xe	
	<ul style="list-style-type: none"> Supporting essential testing with an iterative workflow 	
5:00	Wrap-Up / Questions	
5:30	Evening Social Begins – Details Will Be Provided	

Day 2

7:30	Breakfast Begins	
8:30	Complementary PNT <ul style="list-style-type: none"> Inertial and sensor fusion, LEO PNT, future concepts 	Session 5

Scenario Generation Sessions

	Beginner User Track	Experienced User Track
9:45	<p>NAVWAR Fundamentals II: Session 6b Dynamics and Density</p> <p>Objective: Build on day 1 scenario by adding real-world complexity with multiple dynamic jammers and spoofers.</p> <p>You will run the scenario live on a receiver as a class and successfully jam and spoof the receiver.</p> <p>As time permits, the group will experiment with audience input on jammer modifications and spoofing with receiver clock deviations.</p> <p>Learn: Configure jammer and spoofer motion, add multiple transmitters into the scenario</p>	<p>Advanced NAVWAR II: Session 6e Ground-to-Space NAVWAR and Realistic Theater Modeling</p> <p>Objective: Simulate how ground-based jammers and spoofers can impact space vehicles while adding terrain, atmospheric, and antenna characteristics to create a high-fidelity operational theater environment.</p> <p>Learn: Build a NAVWAR-in-space scenario, incorporate antenna patterns, signal fading and propagation effects, atmospheric conditions, digital surface models, and environmental obstacles</p>
11:30	Lunch	
12:30	<p>Combined Scenario Generation Session Session 7 Scripting with Application to Drone Swarm Scenarios</p> <p>Objective: Experience the power of scripted automation at swarm scale. The session culminates in a high-impact demo: a coordinated swarm of up to 128 drones tracking and surrounding a moving vehicle in a fully simulated environment.</p> <p>Learn: Start with a single virtual drone and quickly learn how a few simple scripts can bring complex motion and behaviors to life. See how automation transforms routine setup into rapid, high-volume scenario generation—enabling mass updates to jammers, motion profiles, and key parameters in just a few lines of code.</p>	
2:00	EMSO & Assured PNT Roadmaps Session 8	
2:45 – 4:30	<p>CUI SESSION – US Citizens Only, Visit Request & ID Required Session 9 GPS M-Code</p> <ul style="list-style-type: none"> How to test GPS Military Code MNSA, AES, SDS Test Vectors, Regional Military Protection (RMP) 	